



Reading Comprehension Worksheet

Grade 7

Name: _____

Date: _____

Turning the Tide: Solving the Ocean Plastic Problem

The Scope of the Problem

Every year, an estimated eight million tons of plastic enter the world's oceans, breaking down slowly into smaller and smaller pieces called microplastics. These tiny fragments are now found nearly everywhere, from deep ocean trenches to Arctic ice, and they enter the food chain when marine animals mistake them for food. Because plastic can take hundreds of years to fully decompose, this is not a problem that will simply resolve itself over time.

Early Attempts, and Why They Fell Short

Some of the earliest proposed solutions focused on large-scale ocean cleanup devices, floating barriers designed to collect plastic drifting on the surface. While these devices captured meaningful amounts of debris, critics pointed out a significant limitation: they addressed plastic already in the ocean without doing anything to stop new plastic from entering in the first place, similar to mopping a floor while the faucet keeps running.

A Shift Toward Prevention

More recent efforts have shifted attention toward preventing plastic from reaching the ocean at all. This includes improved waste management systems in coastal cities, since a large percentage of ocean plastic originates from just a handful of major rivers. Some companies have also begun developing biodegradable packaging materials designed to break down safely within months rather than centuries.

Why a Combined Approach May Be Necessary

Environmental scientists increasingly argue that no single solution will solve the ocean plastic problem alone. Cleanup technology, improved waste infrastructure, biodegradable materials, and reduced plastic production likely all need to work together simultaneously. The scale of the problem, decades of accumulated plastic combined with continued daily production, suggests that meaningful progress will require sustained, coordinated effort

rather than a single breakthrough invention.

Circle the Correct Answer

1. According to the passage, roughly how much plastic enters the world's oceans each year?

- a) Eight thousand tons
- b) Eight million tons
- c) Eight billion tons

2. What was the main limitation of early ocean cleanup devices, according to the passage?

- a) They were too expensive to build at all
- b) They collected existing plastic but did not stop new plastic from entering the ocean
- c) They caused more pollution than they removed

3. Where does much ocean plastic originate, according to the passage?

- a) A handful of major rivers
- b) Deep sea mining operations
- c) Airborne pollution

4. What do environmental scientists increasingly argue, according to the passage's final section?

- a) That a single breakthrough invention will likely solve the problem
- b) That the problem is unsolvable and should be ignored
- c) That multiple solutions likely need to work together at once

True or False

5. Plastic can take hundreds of years to fully decompose. _____

6. The passage claims ocean cleanup devices completely solved the plastic problem. _____

7. Biodegradable packaging is one strategy mentioned for preventing ocean plastic. _____

Fill in the Blank

8. Plastic breaks down into smaller pieces called _____.

9. The passage compares early cleanup devices to mopping a floor while the _____ keeps running.

Think and Explain

10. This passage follows a problem-solution structure. Identify the central problem and trace how the proposed solutions evolve across the passage's sections, from the earliest approach to the most recent thinking.

11. The author uses the comparison 'mopping a floor while the faucet keeps running.' Explain what this comparison means and why it is an effective way to critique early cleanup efforts.
